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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
AFTERGUT, JEFF H	

ART UNIT	PAPER NUMBER
1791	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/568,027	JUDKINS ET AL.	
	Examiner	Art Unit	
	Jeff H. Aftergut	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 June 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art as defined in the Rupel 37 CFR 1.132 declaration filed 6-21-10 and including Colson '108 as described therein further taken with Japanese Patent 9-76378 (newly cited) and Daamen et al (US 4,838,972) optionally in view of Schnebly '630.

The Rupel declaration on page 3 expressly stated that:

> "The process disclosed in the Colson '108 patent and the collector illustrated in Figure 1 of that patent have been used by Hunter Douglas for over 15 years, I have seen that process in operation. Hunter Douglas has used a variety of non-woven fabrics and a moisture cured polyurethane adhesive in this process. Hunter Douglas discards the material which has been wound on the curved portions of the collector, As a result as much as twenty percent of the fabric used in the process is scrapped, It was not obvious to Colson or anyone at Hunter Douglas that the material applied over curved portions of the collector could be reshaped or flattened and become usable through the use of a slow cure adhesive, removing the material from the collector before the adhesive fully cured and allowing the adhesive to cure while the structure was on a flat surface such that the curvature will flatten, Further, the process employed at Hunter Douglas requires the material remain on the collector for about 3 hours so it can go through a steam bath, fully curing the adhesive prior to removing the material from the collector. This is true even though Hunter Douglas has used a moisture cure polyurethane adhesive."

Thus it was known over 15 years ago to practice the processing as defined in Colson '108 with a moisture cure adhesive which clearly was a slow cure adhesive (by virtue of the fact that it required 3 hours to cure on the collector in a steam bath). The applicant was therefore aware of the use of the slow cure adhesives in the process, however there was no recognition that one skilled in the art would have cut the material from the

collector and laid it flat and allowed it to cure in the flat state where the material was not cured on the collector. The admitted prior art suggested that there was a waste of material which was cut and removed from the collector after curing of the material. It should be noted that in Colson ‘108 the collector was some form of polygon which had flat surfaces and in the corners of the flat surfaces (where there was a curve in the material) is where the material is lost. Additionally note that the curing in Colson '108 did take place on a flat surface, it was just a flat surface of the collector. It should be noted that the reference to Colson ‘108 is forming a honeycomb insulation material by winding the material about a mandrel.

Japanese Patent ‘378 suggested that it was known at the time the invention was made to form a honeycomb material which included the steps of feeding a strip toward a cylindrical mandrel and applying an adhesive to the strip prior to reaching the mandrel, wrapping the adhesive coated strip upon the mandrel, cutting the wound strip from the mandrel, and curing the adhesive material to form a honeycomb material. The reference taught that one skilled in the art would have employed an adhesive which was curable and which was cured after the wound material was removed from the mandrel. The reference suggested that one skilled in the art would have cured the material after removal from the mandrel wherein the material was laid flat and the adhesive was allowed to harden. the reference taught that one skilled in the art would have secured the layers together on the mandrel and allowed the adhesive to remain adhesive (uncured) whereby after the wound material was removed from the mandrel, it was cured to form the honeycomb and set the adhesive whereby the finished core was flat

and uncured. Applicant is referred to paragraph [0012] of the machine translation. It should be additionally noted that the reference taught that the shape of the former or mandrel included a polygonal shape or a circular shape, see Figures 6 and 7. the artisan would have readily appreciated that with the unset adhesive in Japanese Patent '378 on the mandrel would have been suitable whether a cylindrical or polygonal shaped mandrel was employed in the operation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to sever the wound assembly of the admitted prior art from a cylindrical mandrel prior to complete curing of the adhesive and laying the same flat and subsequently allowing the adhesive to harden as such was an art recognized technique for mass production of a honeycomb structure as evidenced by Japanese Patent 9-76378 wherein in the known process one set the material on the mandrel (one viewing Japanese Patent '378 would have readily appreciated that the adhesive would have not be cured until after removal from the mandrel and the material was disposed on a flat surface).

While one skilled in the art would have understood that it would have been desirable to wind upon a curved mandrel as opposed to a polygonal shaped mandrel whereby the adhesive was not cured until after removal from the mandrel as suggested by Japanese Patent 9-76378, to further evidence that one skilled in the art would have desired to wind the material on a cylindrical form because it reduces the waste associated with the operation and results in a product having greater uniformity (by eliminating the changes in tension of the wound product at the corners) as evidenced by Daamen et al. Applicant is more specifically referred to column 1, lines 47-65, column 5,

lines 17-34 of Daamen et al. While the material is working on hollow filaments, the reference related to the same problem (winding upon a polygonal mandrel) and provided a similar solution (wind upon a cylindrical shape to eliminate waste and resolve the tensioning issues) it is considered relevant to the question of obviousness. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a cylindrical mandrel in the winding operation of the admitted prior art as such would have eliminated the waste associated with the use of a polygonal mandrel as taught by Daamen et al wherein during processing on the cylindrical mandrel the material was not cured until material was removed from the mandrel as taught by Japanese Patent 9-76378.

While it is clear that in order to form the planar assembly from the severing of the material from the cylindrical mandrel and then curing of the adhesive in the operation of Japanese Patent '378, to further evidence that one skilled in the art would have incorporated a flat plate or support upon which the uncured material was set, the reference to Schnebly is cited. Subsequent to the winding of the strip material, Schnebly ‘630 suggested that one cuts the wound material from the mandrel and laid the assembly upon a flat surface and set the adhesive material in the finished assembly while the assembly was supported on the flat surface to yield a flat assembly (having a non-curved shape). It certainly would have been obvious to one of ordinary skill in the art at the time the invention was made to lay the material on a flat support after removal from the mandrel in Japanese Patent 9-76378 as such was desirable in Japanese

Patent '378 using the flat support as taught by Schnebly in the operation of making a honeycomb assembly as suggested by applicant's admitted prior art.

With regard to dependent claim 2, note that the admitted prior art as well as Colson '108 suggested that the material was a non-woven fabric for instance. Regarding claim 3, note that those versed in the art would have readily understood that the honeycomb structure was used as a shade or blind in the admitted prior art and that the same was attached to a headrail. Regarding claim 4, note that the artisan in the art of shades or blinds would have known to cut the cellular material to form a plurality of structures of smaller width. Additionally note that Schnebly suggested the same. Regarding claim 5, note that Schnebly suggested severing the material on the flat surface and one skilled in the art would have severed the material after removal of the material from the mandrel in order to ensure that the finished material was flat. Regarding claims 6 and 7, note that the admitted prior art as characterized by the declaration clearly suggested that moisture cured polyurethane was used as the adhesive material which took several hours to cure and one skilled in the art would have been expected to utilize the conventional adhesive materials in the operation. Regarding claim 8, note that Japanese Patent '378 suggested that those skilled in the art would have employed a cylindrical mandrel (wheel) in the operation.

Response to Amendment

3. The declaration under 37 CFR 1.132 filed 6-21-10 is sufficient to overcome the rejection of claims 1-8 based upon Colson '108 in view of Daamen et al, Schnebly '630, Corey '296 and Colson et al '720.

The declarations arguments as it relates to Schnebly ‘630 have been found to be persuasive as Schnebly ‘630 did not adhere the layers with the uncured material but rather dried the heat activated adhesive and thus no bond was formed in the winding operation. Additionally while Corey and Colson '720 suggested that polyurethane adhesives were known there is no express teaching that the use of the same was superior to the use of polyester and there is no express discussion regarding the set time for the same. It should be noted as addressed above that the declaration admits that it was known to employ the slow curing moisture cure polyurethane adhesives in the operation of Colson ‘108 and that such was done over 15 years ago. Such is taken as an admission to the state of the prior art.

Response to Arguments

4. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

It should be noted regarding the reference to Daamen et al that the reference clearly suggested that the advantage of using a cylindrical mandrel was the lack of waste in the finished assembly. Clearly one would have been motivated to use the same in the process of the admitted prior art. Additionally, to remove the material from the cylinder that it was wound upon prior to curing of the material (and disposing the same upon a flat surface) was known as suggested by Japanese Patent ‘378.

No claims are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Jeff H. Aftergut/ whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:30-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff H. Aftergut/
Primary Examiner
Art Unit 1791

JHA
July 23, 2010